

(FILE 'HOME' ENTERED AT 13:41:35 ON 29 NOV 2000)

FILE 'USPATFULL' ENTERED AT 13:41:42 ON 29 NOV 2000

L1 16 S AGGREGAT? (4A) PAYLOAD#  
L2 2591 S (GENERAT? OR CREAT?) (P) MESSAGE? (P) GROUP#  
L3 258 S SUBSET? (P) HOST### (P) COMPUTER#  
L4 17 S L3 AND L2  
L5 1 S L4 AND L1  
L6 32 S L4 OR L1

=> d 1-32 pn,ab

L6 ANSWER 1 OF 32 USPATFULL

PI US 6154773 20001128

AB Entertainment content complementary to a musical recording is delivered to a user's computer by means of a computer network link. The user employs a browser to access the computer network. A plug-in for the browser is able to control an audio CD or other device for playing the musical recording. A script stored on the remote computer accessed over the network is downloaded. The script synchronizes the delivery of the complementary entertainment content with the play of the musical recording.

L6 ANSWER 2 OF 32 USPATFULL

PI US 6125111 20000926

AB An architecture for a modular communications system is disclosed. The modular communications system comprises at least one control module; a plurality of resource modules for receipt of external payload data provided to said system or for manipulation of the payload data; a plurality of resource module links, one link connecting each resource module to the control module and each resource module. The control module comprises a switch for switching payload data between the plurality of resource modules; and a bandwidth allocator comprising a bandwidth selector and a distributor each connected to the switch and to the resource module links. The bandwidth selector allows the selection of the bandwidth of payload data passed from any of the resource modules to the time switch. Similarly, the bandwidth distributor allows for the selection of the bandwidth of payload data switched through the switch and provided to any of the resource modules from the control module. Preferably, all the resource module links are electrically isolated from each other. The architecture provides for the modular assembly of a telecommunications offering varied capacities, redundancies and services.

L6 ANSWER 3 OF 32 USPATFULL

PI US 6115422 20000905

AB A method of implementing a time base change to a time-division multiplexed bitstream, for example an MPEG-2-compatible bitstream. The time base change is in response to a Time Base Change Flag. The bitstreams have video and audio packetized elementary streams, and each of these streams has a common time base. Each of the packetized elementary streams has a packet header, and packet data. The packet

headers of the packetized elementary streams each contain a Presentation Time Stamp/Decoding Time Stamp flag field, a Presentation Time Stamp field, and a Decoding Time Stamp field. A time base change is indicated by a change in the PCR. The first step in changing the Time Base is receiving a discontinuity in the bitstream. This is used to disable synchronization of the video and audio bitstreams, and to mark a data byte in the bitstream associated with the Time Base Change Flag. The time base change is carried out and an interrupt is issued when the marked data byte arrives for decoding. This interrupt re-enables synchronization of the audio and video bitstreams.

L6 ANSWER 4 OF 32 USPATFULL

PI US 6061549 20000509

AB A D-AMPS+ cellular communications air interface is presented wherein a packet data control channel and packet data traffic channel is supported in addition to the conventional digital control channel and digital traffic channel. In particular, the packet data control channel, packet data traffic channel and digital traffic channel support multiple modulation level operation (high versus low). Procedures are provided for intracell and intercell modulation transition of mobile station communications carried by a traffic channel. In particular, these procedures facilitate intracell and intercell modulation transition to a traffic channel using the same level of modulation, as well as intracell and intercell (fall-forward and fall-backward) modulation transition to a traffic channel using a different level of modulation.

L6 ANSWER 5 OF 32 USPATFULL

PI US 6023729 20000208

AB A method and apparatus related to grouping (or matching) network users and computers associated with multi-user applications is disclosed. Each user is associated with a client computer that is connected to a network. A match maker application resides on one or more server computer(s). The match maker application controls the process of collecting Clients into matched sets, called client groups, based upon a wide range of attributes of the users, their client computers, the server computers, software application titles, application instances and/or data communication links of the network, for example. Each time the match maker application creates a client group, it creates a group data set that represents the client group. Network match making information is presented to users in an understandable manner using icons, other graphical images or collections of icons and/or images, for example, displayed on a display screen. For example, a non-textual element of a graphical image can be varied to communicate group information about a client group to a user. A variety of non-textual elements can be used to communicate a variety of group information to a user.

L6 ANSWER 6 OF 32 USPATFULL

PI US 6018766 20000125

AB A method for deploying interactive applications over a network containing host computers and group messaging servers is disclosed. The method operates in a conventional unicast network architecture comprised of conventional network links and unicast gateways and routers. The hosts send messages containing destination group addresses by unicast to the group messaging servers. The group addresses select message groups maintained by the group messaging servers. For each message group, the group messaging servers also maintain a list of all of the hosts that are members of the particular group. In its most simple implementation, the method consists of the group server receiving a message from a host

containing a destination group address. Using the group address, the group messaging server then selects a message group which lists all of the host members of the group which are the targets of messages to the group. The group messaging server then forwards the message to each of the target hosts. In an interactive application, many messages will be arriving at the group server close to one another in time. Rather than simply forward each message to its targeted hosts, the group messaging server aggregates the contents of each of messages received during a specified time period and then sends an aggregated message to the targeted hosts. The time period can be defined in a number of ways. This method reduces the message traffic between hosts in a networked interactive application and contributes to reducing the latency in the communications between the hosts.

L6 ANSWER 7 OF 32 USPATFULL

PI US 5991286 19991123

AB A D-AMPS+ cellular communications air interface is presented wherein a packet data control channel and packet data traffic channel is supported in addition to the conventional digital control channel and digital traffic channel. In particular, the packet data control channel and packet data traffic channel support multiple modulation level operation (high versus low). Procedures are provided for mobile station selection, as well as re-selection, of either the high or low-level modulation for the packet channels. Procedures are further provided for facilitating a fall-forward to the high-level modulation packet data control channel, or a fall-backward to the low-level modulation packet data control channel with respect to both uplink and downlink packet data communications.

L6 ANSWER 8 OF 32 USPATFULL

PI US 5956401 19990921

WO 9604726 19960215

AB A communications path not using a deterministic signal frame structure is provided with performance monitoring by using known Alarm Indication Signal (AIS) type monitoring on the path but scrambling traffic signals in a scrambler to avoid them being mistaken for an AIS. At the receiving end of the path the received signals are monitored for the presence of an AIS, followed by a descrambler to unscramble the received signals before transmitting them to a receiving piece of CPE. An adverse state detector may also be provided, to avoid the scrambler scrambling traffic signals to that they look like an AIS.

L6 ANSWER 9 OF 32 USPATFULL

PI US 5924083 19990713

AB A distributed electronic trading system for displaying a real-time credit filtered view of at least one market in which financial instruments are traded in which the market view includes a predetermined number of orders currently available to a viewing trading entity based upon one or more credit limits entered by the viewing trading entities and/or other trading entities in the system includes a host for receiving and storing orders and credit information entered by a plurality of trading entities including the viewing trading entity, for transmitting the orders and predetermined display parameters, and for selectively transmitting the credit information; a plurality of intelligent nodes linked to the host; and a plurality of keystations respectively linked to one or more of the intelligent nodes. Each intelligent node includes a credit information storage unit for storing the selected credit information, an order book storage unit for storing the orders and display parameters, and a processor for generating

real-time credit filtered market view display information for each assigned trading entity. The real-time credit filtered market view display information includes the predetermined number of unilaterally and/or bilaterally credit filtered orders and corresponding available quantities. The displayed market view may consist of individual order prices and quantities, aggregated prices and quantities, and/or average prices at predetermined quantities chosen by the viewing trading entity.

L6 ANSWER 10 OF 32 USPATFULL

PI US 5878039 19990302

AB An interface device is provided which may be used to perform rate adaptation and time slot assignment, in either the transmit or receive directions, in a multiplexing unit for interfacing a high rate optical carrier line to a plurality of lower rate information carrier lines. The high rate optical carrier line may be a SONET or SDH carrier line. The interface device according to the present invention may be operationally configured to provide data rate adaptation and time slot assignment between an optical carrier line operating at an OC-12 rate with lower rate lines operating according to OC-3, OC-1, DS-3, or DS-1 protocols, or even virtual channels. A plurality of identical interface devices may be cascaded together and used to perform interface support for various channels operating at various rates, merely by manipulating the operational configuration of the individual interface devices in the cascade.

L6 ANSWER 11 OF 32 USPATFULL

PI US 5822523 19981013

AB A method for deploying interactive applications over a network containing host computers and group messaging servers is disclosed. The method operates in a conventional unicast network architecture comprised of conventional network links and unicast gateways and routers. The hosts send messages containing destination group addresses by unicast to the group messaging servers. The group addresses select message groups maintained by the group messaging servers. For each message group, the group messaging servers also maintain a list of all of the hosts that are members of the particular group. In its most simple implementation, the method consists of the group server receiving a message from a host containing a destination group address. Using the group address, the group messaging server then selects a message group which lists all of the host members of the group, which are the targets of messages to the group. The group messaging server then forwards the message to each of the target hosts. In an interactive application, many messages will be arriving at the group server close to one another in time. Rather than simply forward each message to its targeted hosts, the group messaging server aggregates the contents of each of messages received during a specified time period and then sends an aggregated message to the targeted hosts. The time period can be defined in a number of ways. This method reduces the message traffic between hosts in a networked interactive application and contributes to reducing the latency in the communications between the hosts.

L6 ANSWER 12 OF 32 USPATFULL

PI US 5799151 19980825

AB An interactive trade network is described that integrates distributive messaging using a host computer and telecommunication networks, real-time interactive communications, a hierarchical knowledge matrix containing two familiar and comprehensive indices of classes of goods and classes of establishments and a legend of trade-related, cross-reference terms or parameters, a multiline programmable

application, an integrated application program interface, and integrated application programs. The Host System uses each Index Number of each of the indices as a topic board name. The apparatus creates a highly-selective media for either (a) messaging on mutually exclusive indexed topics of trade or (b) engaging in public or private real-time conferencing or electronic mail dedicated to any class of indexed economic activity. It enables progressive discussions on, and the retrieval of just the information needed under, discrete indexed topics on trade instantaneously. The interface typically facilitates access to one of thousands of topic boards upon input for, or interpreted to, three key strokes in the selector process. Users may review, broadcast, post or "chain" messages to one party or multiple parties, whether known or anonymous. Messages are cross-referenceable by geographic codes, time and other alpha-numeric descriptors.

L6 ANSWER 13 OF 32 USPATFULL

PI US 5737337 19980407

AB In an ADSL transmitter (62), data is flamed and split between a fast path and an interleave path by multiplexer (66). Data is forward error correction encoded in FEC encoder (70). Data on the interleave path is interleaved by interleaver (72) if an interleave depth (D) is  $>2$ . During interleaving, at least one additional read operation is performed, after a series of consecutive write and read operations. The additional read operation permits interleaving to continue without waiting for a next frame of data to arrive at the interleaver. An equal number of additional write operations compensates for the additional reads at a later point. Use of an interleaving memory can also be avoided by turning off or disabling the interleaver, while still permitting data to be sent along the interleave path. Transmit path controller (74) senses if  $D=1$ , and if so disables the interleaver and avoids the need for interleaver memory (64).

L6 ANSWER 14 OF 32 USPATFULL

PI US 5634011 19970527

AB A multinode, multicast communications network has a distributed control for the creation, administration and operational mode selection operative in each of the nodes of the network. Each node is provided with a Set Manager for controlling either creation of, administration or access to a set of users to whom a multicast is to be directed. The Set Manager maintains a record of the local membership of all users associated with the node in which the Set Manager resides. A given Set Manager for each designated set of users is assigned the task of being the Set Leader to maintain membership information about the entire set of users in the multicast group. One of the Set Managers in the communications network is designated to be the Registrar which maintains a list of all the Set Leaders in the network. The Registrar insures that there is one and only one Set Leader for each set of users, answers inquiries about the membership of the sets and directs inquiries to appropriate Set Leaders if necessary. All of the set creation, administration and control functions can therefore be carried out by any node of the system and provision is made to assume the function at a new node when failure or partition in the network occurs.

L6 ANSWER 15 OF 32 USPATFULL

PI US 5533005 19960702

AB Data is protected in a data transmission system operating on the synchronous digital hierarchy. The data is transmitted in multiplex form between ports in the system and protection is applied between ports at different or the same aggregate bit rates. This protection is achieved

by selecting between individual portions of the payload within the aggregate signals and each part of mutually protective portions has the same nominal traffic capacity. By duplexing an alternative signal path is created to ensure a continuity of traffic through the system in the event of a fault in one path.

L6 ANSWER 16 OF 32 USPATFULL

PI US 5469434 19951121

AB A time division multiplexer (TDM) is provided for multiplexing data from a plurality of channels. The TDM system generally comprises a high speed time division multiplexed digital data bus, a synchronizing bus, a plurality of channel cards coupled between the data channels and the data bus with each channel card having its own processor and memory, and a system communication manager (SCM) which is also coupled to the digital bus, and includes a (micro)processor. The processor of the SCM determines the frame for the system and initially forwards the frame information to each of the channel cards during predetermined time slots of the high speed data bus. The channel cards are synchronized by the SCM via the synchronization bus, and the channel cards use the synchronization information and the framing information in order to appropriately place data on and take data off of the high speed data bus without the use of an address bus. A system overhead frame (SOF) is also preferably multiplexed into timeslots of the high speed data bus. Thus, during operation, the high speed data bus multiplexes not only data from the channel cards, but system overhead information as well as framing information.

L6 ANSWER 17 OF 32 USPATFULL

PI US 5276899 19940104

AB A multiprocessor system interouples the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data content of the messages, to a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 18 OF 32 USPATFULL

PI US 5271582 19931221

AB Multiple subsidiary small payloads are connected to standard mechanical and electrical interfaces provided by an expendable or recoverable modular mother satellite bus (MMSB) and launched into space as an assembly acting as a common carrier providing low unit launch costs for the attached subsidiary payloads and also providing a variety of electrical, pointing, and thermal control services for these payloads after reaching orbit. These services include but are not necessarily limited to controlled separation of free-flying satellites or re-entry vehicles, regulated electric power at a variety of voltages, telemetry, computer control, payload control via time delayed pre-programmed instructions, optional real-time payload control via direct radio communication or transmission through geostationary or other communication satellite links, time-driven or event-driven control

logic, mass data memory, encryption and decryption of data and commands, payload pointing, augmented heat rejection, and interconnection between subsidiary attached payloads through the data bus.

L6 ANSWER 19 OF 32 USPATFULL

PI US 5199672 19930406

AB The effect of orbit plane precession is used to place a plurality of satellites into one or more desired orbit planes. The satellites are distributed within each desired orbit plane in a selected configuration. The satellites are transported into orbit on one or more frame structures referred to as "pallets". When more than one pallet is used, they are placed on top of each other in a "stack". After the stack of the pallets has been launched into an initial, elliptical orbit, the pallets are separated sequentially from the stack at selected time intervals. Thrust is applied to transfer a first pallet from the initial orbit to a first, circular orbit, wherein the initial and first orbits are in planes that precess at different predetermined initial and first rates, respectively. After waiting for a predetermined time while the initial orbit plane and the first orbit plane precess with respect to each other, thrust is applied to the next pallet to transfer it into a next, circular orbit in a next orbit plane, wherein the precession rate of the next orbit plane also is different from the initial precession rate of the initial orbit plane. The foregoing step is repeated until the satellites on the respective pallets have been sequentially deployed into the desired orbit planes. The satellites on each pallet are then separated from the pallet simultaneously, but at different rates to achieve separation among the satellites within each orbit.

L6 ANSWER 20 OF 32 USPATFULL

PI US 5143326 19920901

AB The invention is a rig useful in preventing relative movement between two hicles or other payloads suspended from a helicopter. The rig has two triangular plates which are in connection between the vehicles, the connection being loose before cables from the helicopter to the triangular plates are tensioned. When the helicopter rises, tension on the cables raises the triangular plates, thereby pivoting clevises which are engaged with the triangular plates and which are mounted on on the vehicles. The pivoting of the clevises draws the vehicles into tight abutment with abutment plates at the ends of the triangular plates so that the vehicles act as a single, more stable load. A cross member is connected both between the triangular plates and between the vehicles to inhibit relative lateral movement of the vehicles.

L6 ANSWER 21 OF 32 USPATFULL

PI US 5111384 19920505

AB A system for automating the dump analysis process includes a remotely located host computer system which, in response to requests from a local expert computer system, retrieves only relevant values from one or more physical memory dumps. The expert system reconstructs from these values the operating system control structures represented in the dump, and applies expert knowledge on these control structures to determine the symptom of the problem occurring on the computer system which stopped operating and generated the dump.

L6 ANSWER 22 OF 32 USPATFULL

PI US 5006978 19910409

AB A multiprocessor system intercouple the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data

content of the messages, to a single or common priority message which is distributed to the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 23 OF 32 USPATFULL

PI US 4956772 19900911

AB A multiprocessor system intercouple the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data content of the messages, to a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 24 OF 32 USPATFULL

PI US 4945471 19900731

AB A multiprocessor system intercouple the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data content of the messages, to a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 25 OF 32 USPATFULL

PI US 4908612 19900313

AB A computer input-output device for permitting a user to control the operation of an application program on a host computer. The device includes a display divisible into a plurality of sections for displaying the names of the options then available to the user at any point in the operation of the application program. Selection keys associated with each section allow the user to select the option displayed in the corresponding section. In response to the selection, the input device sends a series of keystroke codes to the keyboard input port of the host computer to cause the application program to execute the selected option. The host computer keyboard is connected to the input-output device which intercepts keystroke codes generated by the keyboard and



transmits them to the computer only if the codes are designated as permissible ones. A set of programmable arrow keys controls the pointer functions of the application program on the host computer screen.

L6 ANSWER 26 OF 32 USPATFULL

PI US 4891600 19900102

AB A means for controllably accelerating a particle of matter having a selected dipole characteristic is shown. The means includes a means for generating an alternating electric field extending a first direction, which varies at a selected frequency and which has a predetermined magnitude which is less than the characteristic field ionization potential limit of a particle. A means for generating an alternating magnetic field is provided. The alternating magnetic field extends in a second direction at a predetermined angle to and crosses and intercepts the electric field to define a spatial force field region. The alternating magnetic field has a frequency which is substantially equal to and is at a predetermined phase angle relative to the alternating electric field and is at a flux density which, when multiplied times the selected frequency, is less than the characteristic field ionization limit of a particle. Means are provided for establishing a particle at a selected temperature below a particle thermal ionization level and for transporting a particle into the spatial force field region causing the dipole of a particle to be driven into cyclic motion at substantially the selected frequency which accelerates a particle in a direction substantially normal to the directions of the electric field and said magnetic fields. A control means for establishing a predetermined spatial and time relationship between the electric field, magnetic field and dipole cyclic motion to control a particle acceleration is provided.

L6 ANSWER 27 OF 32 USPATFULL

PI US 4814979 19890321

AB A multiprocessor system interouples the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data content of the messages, to a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 28 OF 32 USPATFULL

PI US 4663932 19870512

AB A dipolar force field propulsion system having a alternating electric field source for producing electromotive lines of force which extend in a first direction and which vary at a selected frequency and having an electric field strength of a predetermined magnitude, a source of an alternating magnetic field having magnetic lines of force which extend in a second direction which is at a predetermined angle to the first direction of the electromotive lines of force and which cross and intercept the electromotive line of force at a predetermined location defining a force field region and wherein the frequency of the alternating magnetic field substantially equal to the frequency of the alternating electric field and at a selected in phase angle therewith

and wherein the magnetic field has a flux density which when multiplied times the selected frequency is less than a known characteristic field ionization potential limit; a source of neutral particles of matter having a selected dipole characteristic and having a known characteristic field ionization potential limit which is greater than the magnitude of the electric field and wherein the dipoles of the particles of matter are capable of being driven into cyclic rotation at the selected frequency by the electric field to produce a reactive thrust, a vaporizing stage which vaporizes said particles of matter into a gaseous state at a selected temperature, and a transporting system for transporting the vaporized particles of matter into the force field defined by the crossing electromotive lines of force and the magnetic lines of force.

L6 ANSWER 29 OF 32 USPATFULL

PI US 4649533 19870310

AB The information retrieval method and apparatus includes a group of geographically widely-distributed terminals, which accept a remotely located host computer. Each terminal includes a memory for storing a plurality of items of call origination information. A call origination circuit transmits individual ones of the items of call origination information via a communication path to the switching system for causing it to extend the path to the host computer. Logic circuits transfer a first one of the items of call origination information indicative of the geographically shortest communication path, to the call origination circuit in an attempt to extend a communication path, of the geographically shortest length, to the host computer. If the attempt proves unsuccessful, the logic circuit sends automatically a second one of the items of call origination information, indicative of the next shortest communication path length.

L6 ANSWER 30 OF 32 USPATFULL

PI US 4543630 19850924

AB A multiprocessor system interouples the processors with an active logic network having a plurality of priority determining nodes. Messages applied concurrently to the network in groups are sorted, using the data content of the messages, to a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 31 OF 32 USPATFULL

PI US 4445171 19840424

AB A multiprocessor system interouples processors with an active logic network having a plurality of priority determining nodes. Messages are applied concurrently to the network in groups from the processors and are sorted, using the data content of the messages to determine priority, to select a single or common priority message which is distributed to all the processors with a predetermined total network delay time. Losing messages are again retried concurrently in groups at a later time. Message routing is determined by local acceptance or rejection of messages at the processors, based upon destination data in

the messages. All messages occupy places in a coherent priority scheme and are transferred in contending groups with prioritization on the network. Using data, status, control and response messages, and different multiprocessor modes, the system is particularly suited for configuration in a relational data base machine having capability for maintaining an extended data base and handling complex queries.

L6 ANSWER 32 OF 32 USPATFULL

PI US 4412285 19831025

AB A system using a sorting network to intercouple multiple processors so as to distribute priority messages to all processors is characterized by semaphore means accessible to both the local processors and the global resource via the network. Transaction numbers identifying tasks are employed in the messages, and interfaces at each processor are locally controlled to establish transaction number related indications of the current status of each task being undertaken at the associated processor. A single query to all processors via the network elicits a prioritized response that denotes the global status as to that task. The transaction numbers also are used as global commands and local controls for the flow of messages. A destination selection system based on words in the messages is used as the basis for local acceptance or rejection of messages. This arrangement together with the transaction number system provides great flexibility as to intercommunication and control.